

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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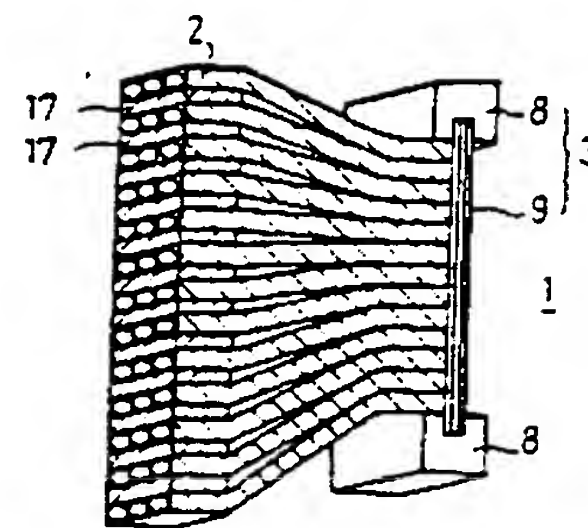
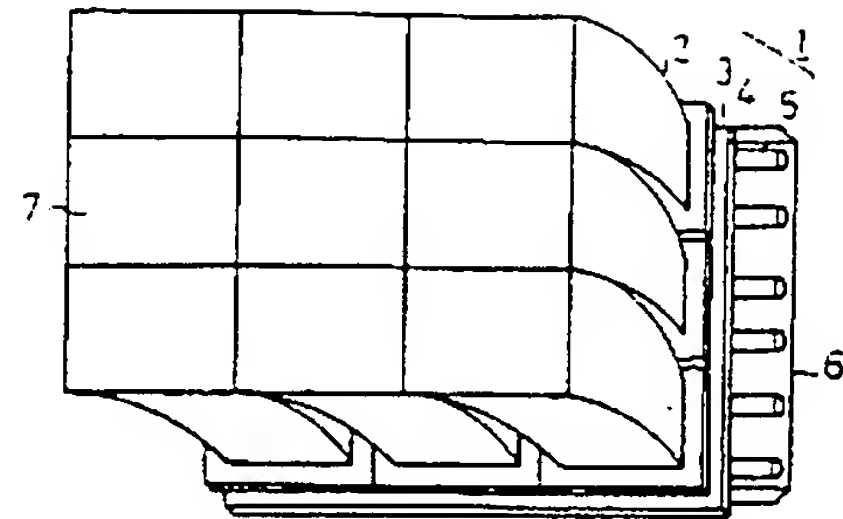
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APPLICANT : NIPPON TELEGR & TELEPH CORP  
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TITLE : PRODUCTION OF IMAGE DISPLAY  
DEVICE AND OPTICAL FIBER GROUP



ABSTRACT : PURPOSE: To decrease the quantity of the fibers to be used and to decrease the weight of the above device by forming the magnifying optical system of images from the ratio between the area of the end part where optical fiber bundles are concentrically arranged and the area of the end part where the optical fiber bundles are linearly arranged.

CONSTITUTION: The light generated by bar-shaped light sources 5, such as fluorescent lamp, is made into the light of a uniform distribution by a diffusing plate 4 and a reflecting plate 6. This light illuminates a liquid crystal display 3 and the light past the display 3 is magnified to the area larger than the surface area of the display 3 by the optical fiber bundles 2. The light is emitted from the end faces thereof, by which a screen is formed. Since the fiber bundles 2 are expanded wider than the areas of the peripheral circuit 8 of the display 3 and a display surface 7 added together, the continuous connection of the respective fiber bundles 2 to each other is possible. The one end of the fiber bundles 2 in contact with the display surface of the display 3 is closely packed or bundled in a square. The light past the panel 9 of the display 3 is thus most efficiently converged.

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